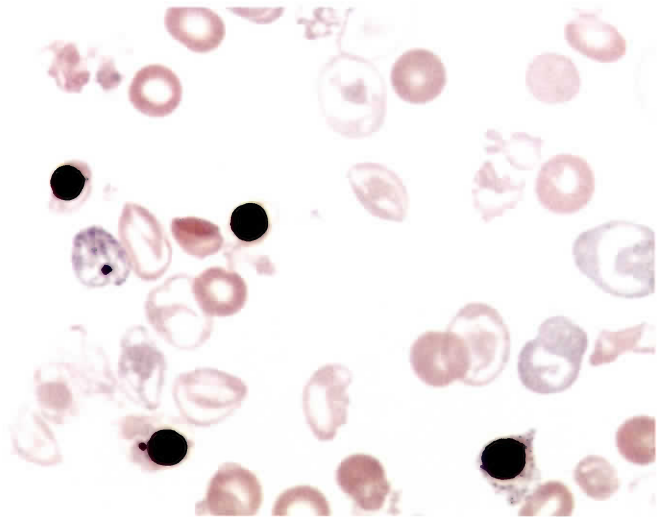
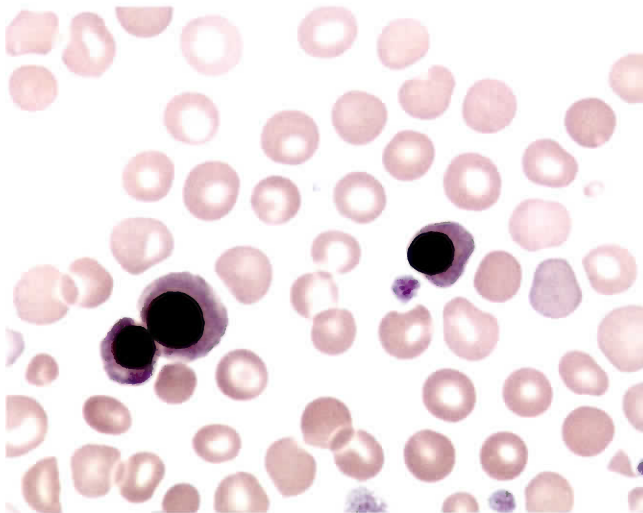


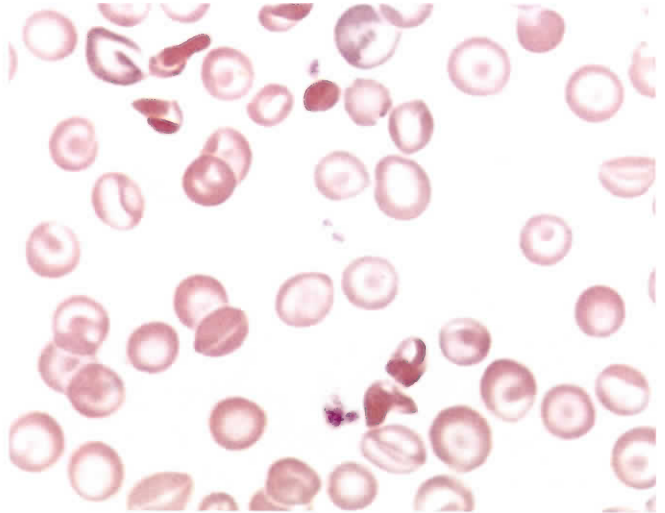
Color Plate 1



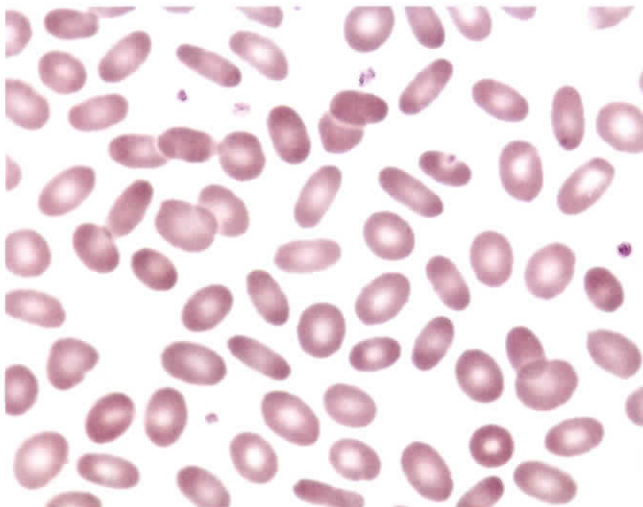
Color Plate 4



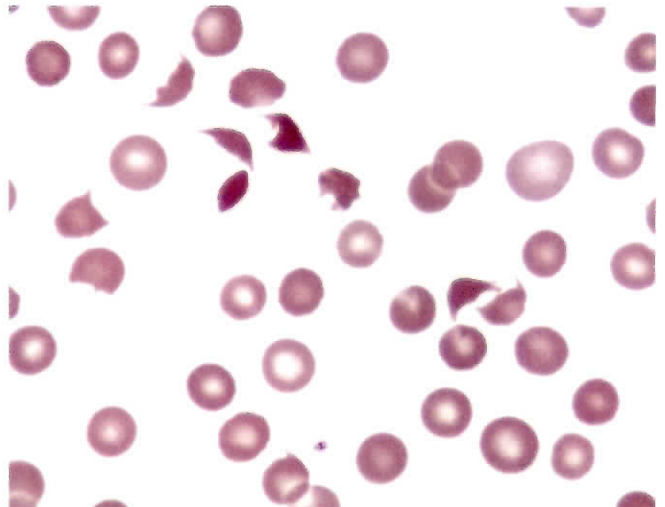
Color Plate 2



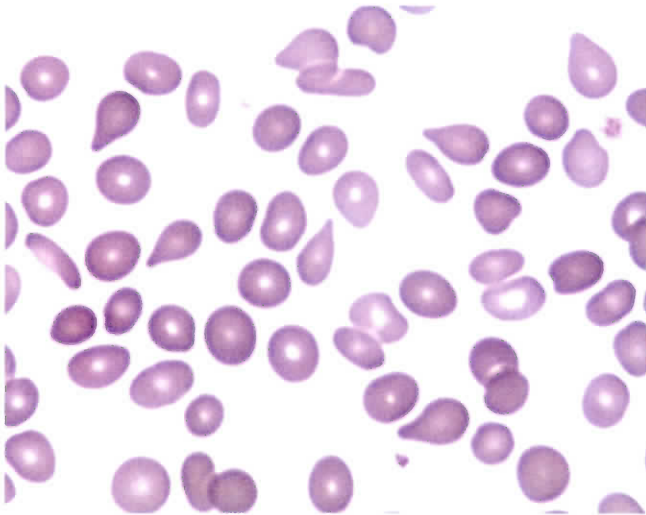
Color Plate 5



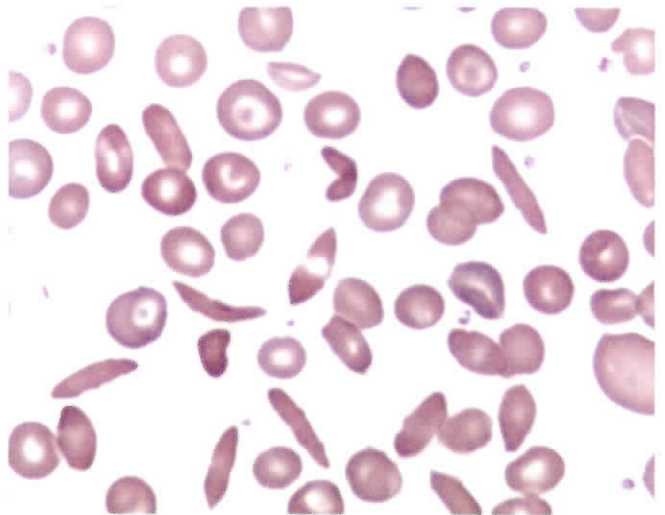
Color Plate 3



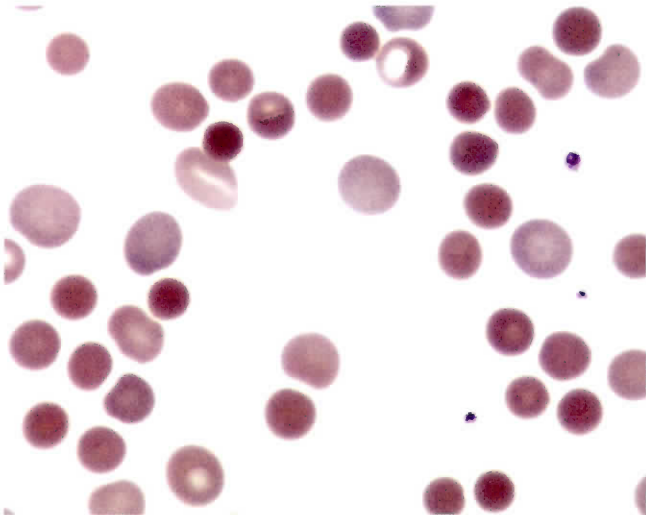
Color Plate 6



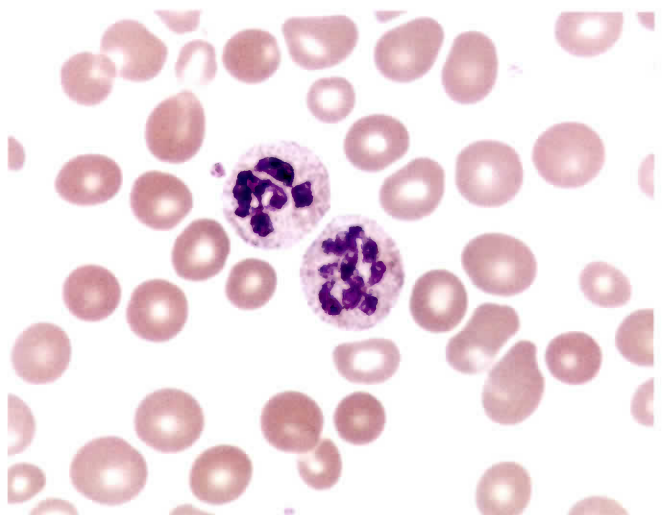
Color Plate 7



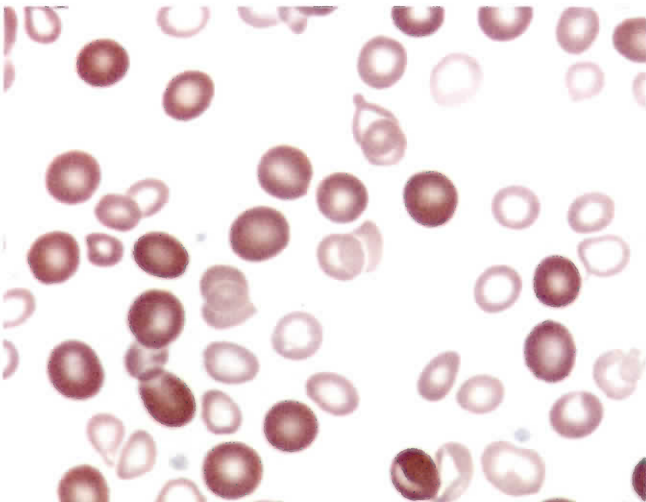
Color Plate 10



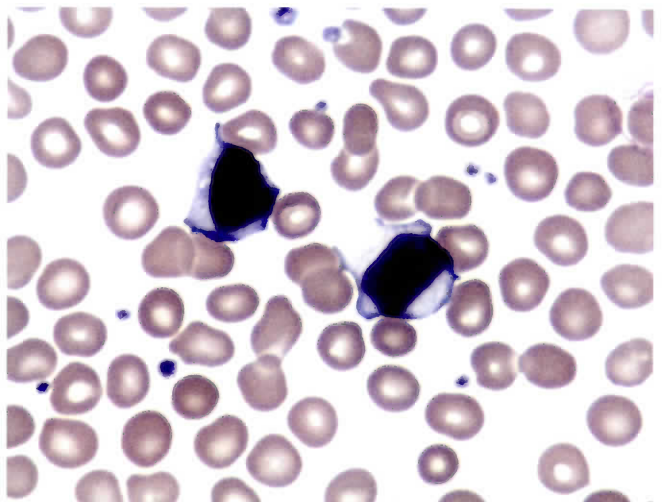
Color Plate 8



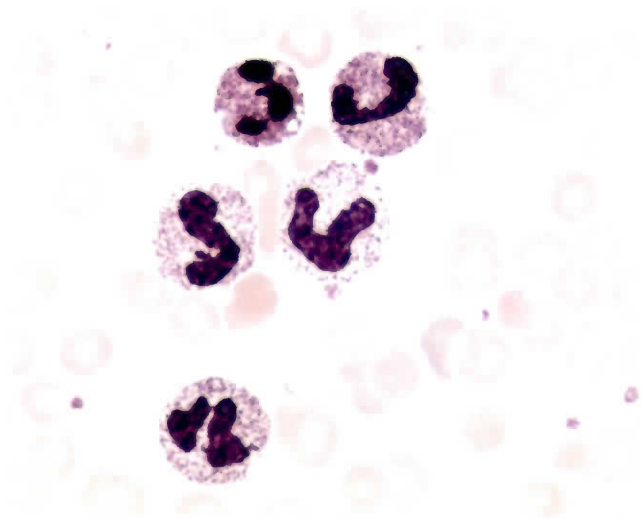
Color Plate 11



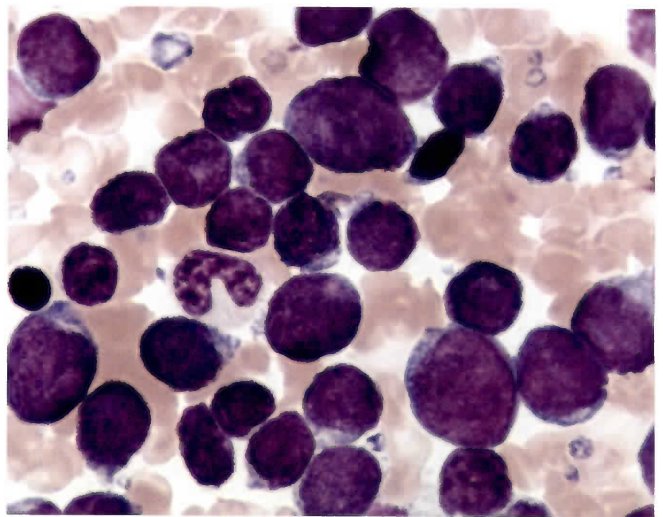
Color Plate 9



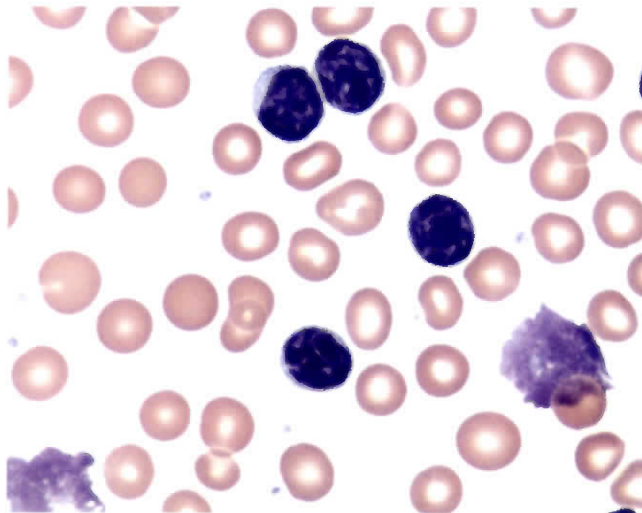
Color Plate 12



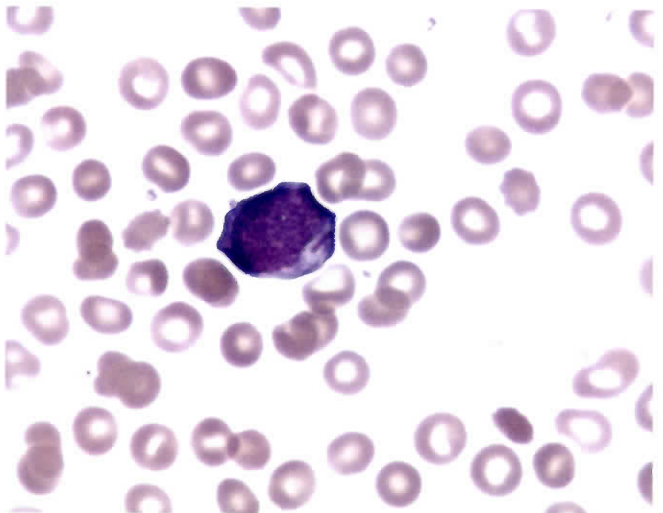
Color Plate 13



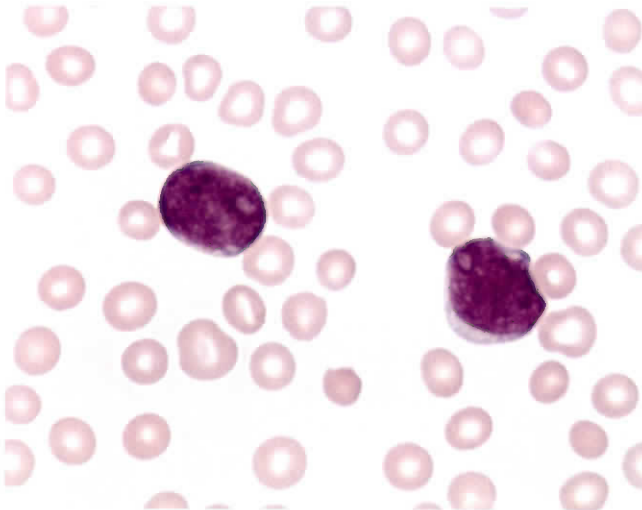
Color Plate 16



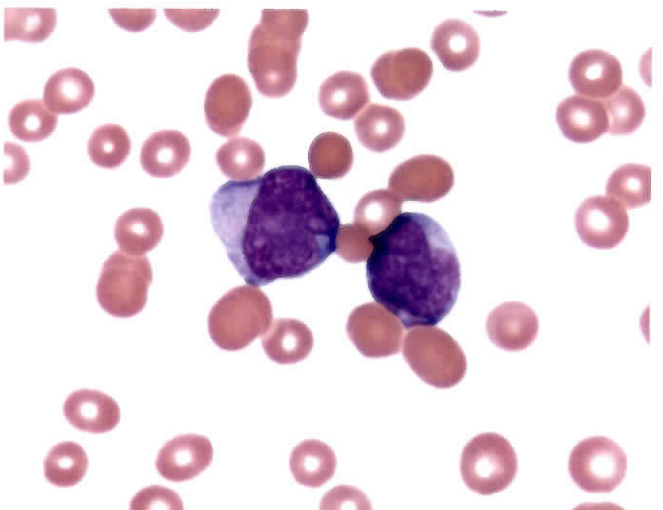
Color Plate 14



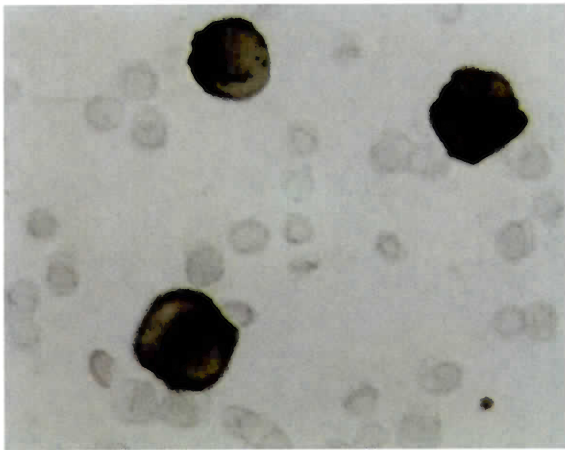
Color Plate 17



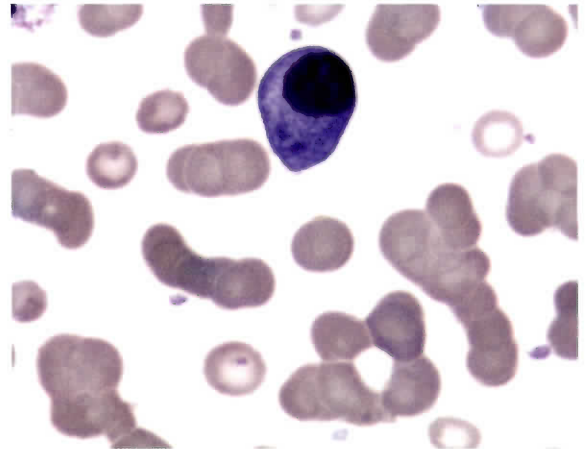
Color Plate 15



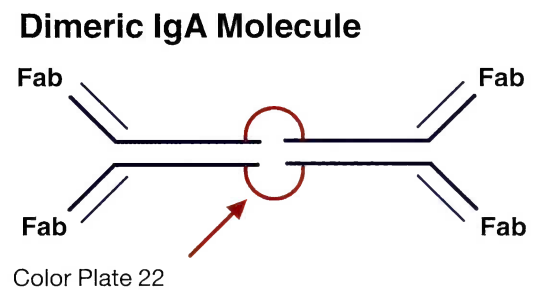
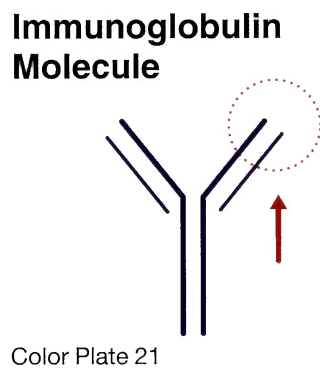
Color Plate 18



Color Plate 19

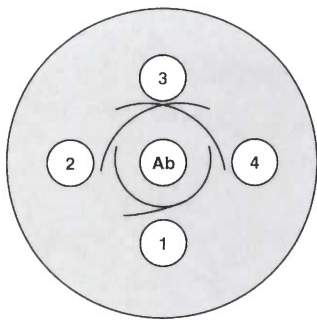


Color Plate 20



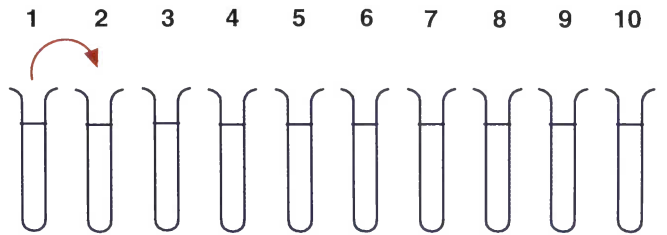
Tube No.	1	2	3	4	5	6	7	8	9	10	11
Agglutination	0	1+	2+	4+	4+	3+	3+	2+	1+	1+	0

Color Plate 23



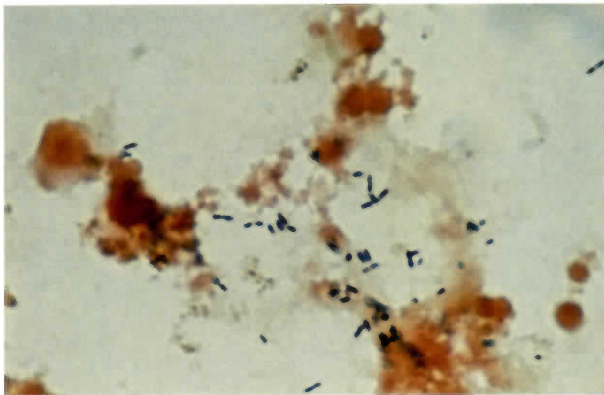
Color Plate 24

Tube No.

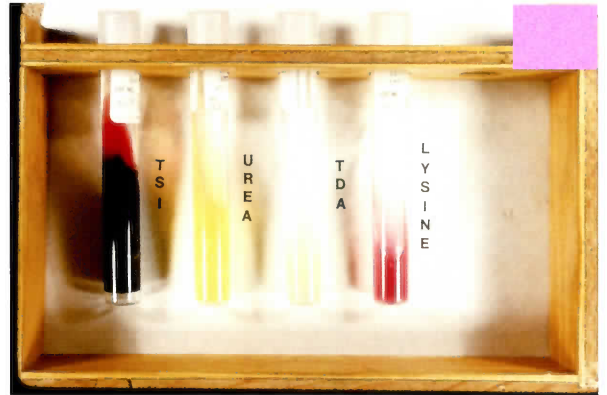


Agglutination
Color Plate 25

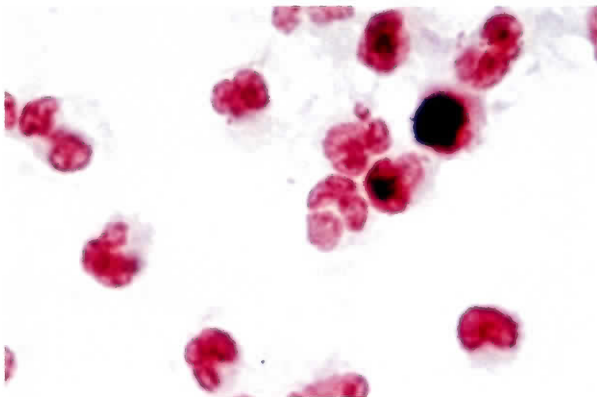
Pos Pos Pos Pos Pos Pos Pos Pos Neg Neg



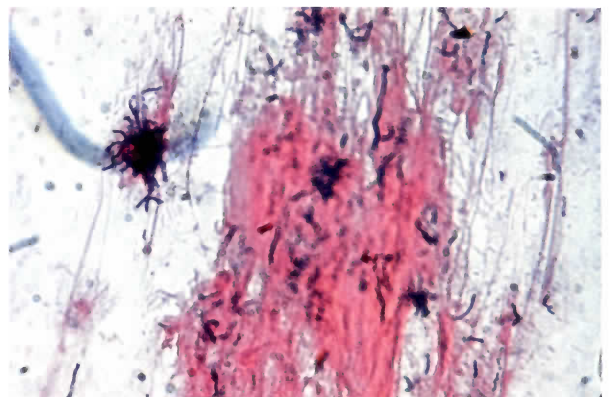
Color Plate 26



Color Plate 27



Color Plate 28



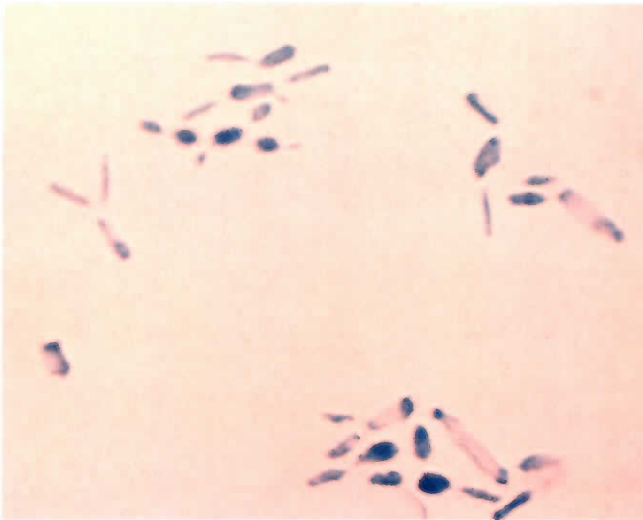
Color Plate 29



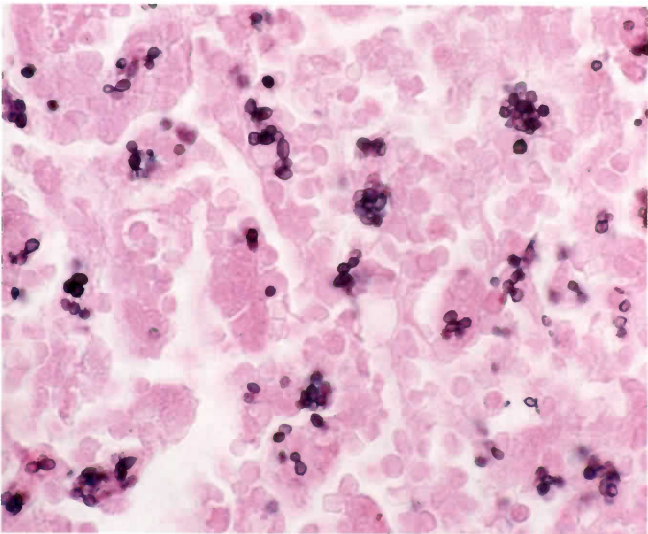
Color Plate 30



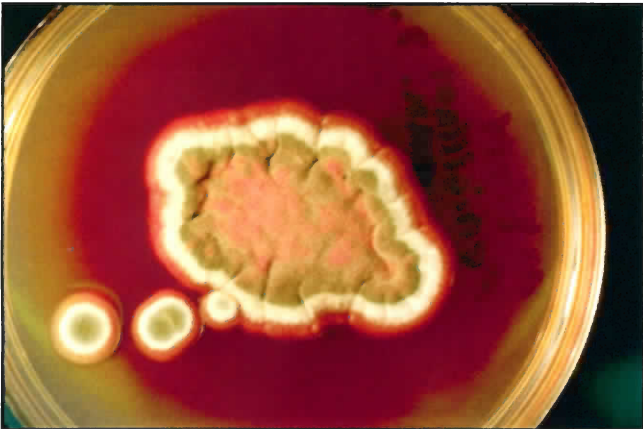
Color Plate 31



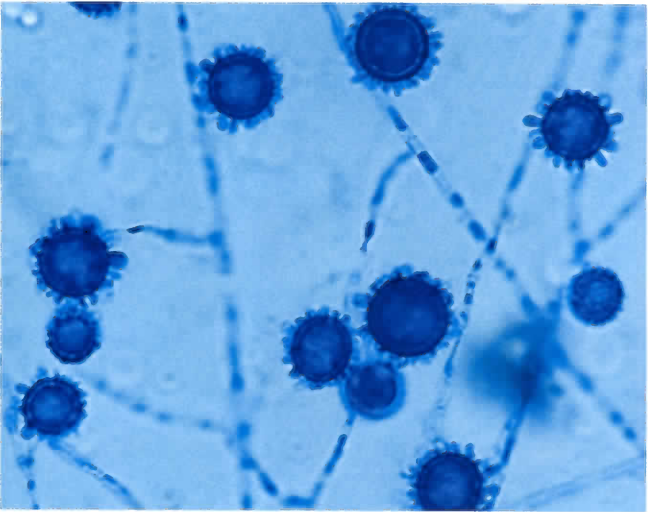
Color Plate 32



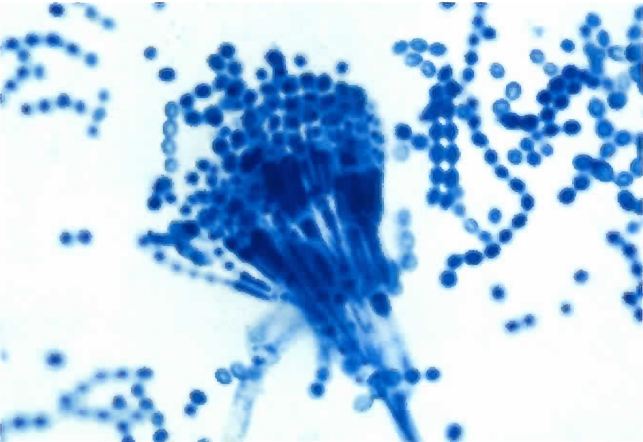
Color Plate 35



Color Plate 33



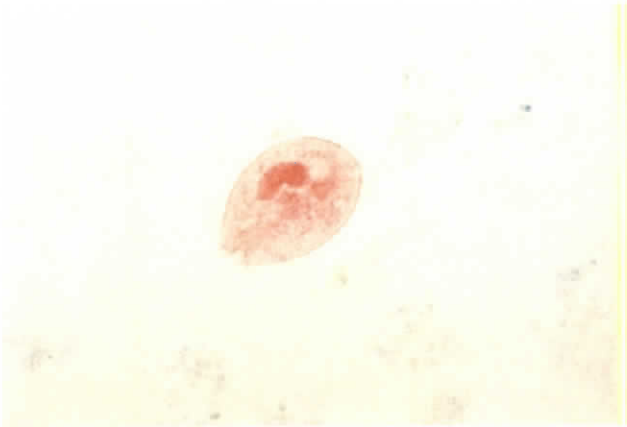
Color Plate 36



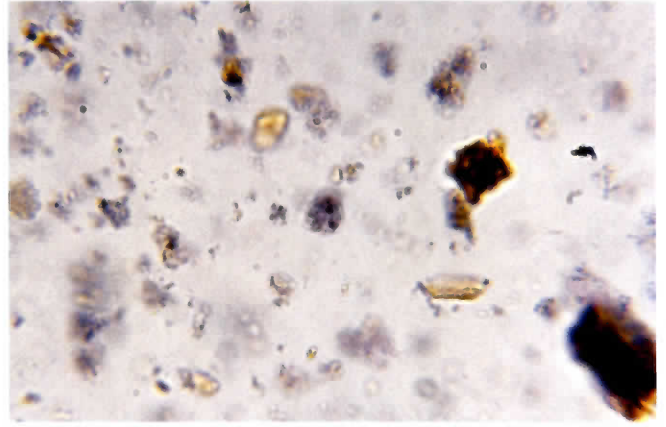
Color Plate 34



Color Plate 37



Color Plate 38



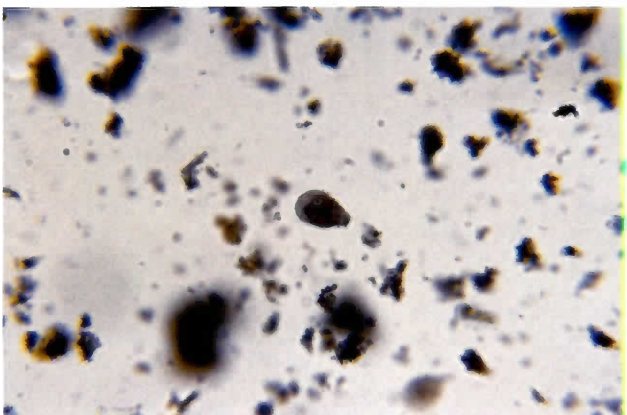
Color Plate 41



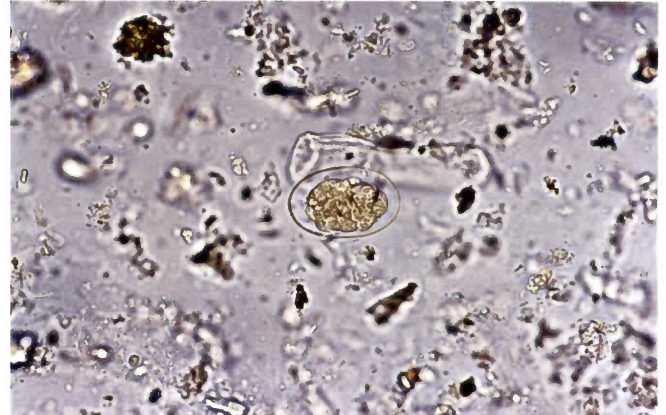
Color Plate 39



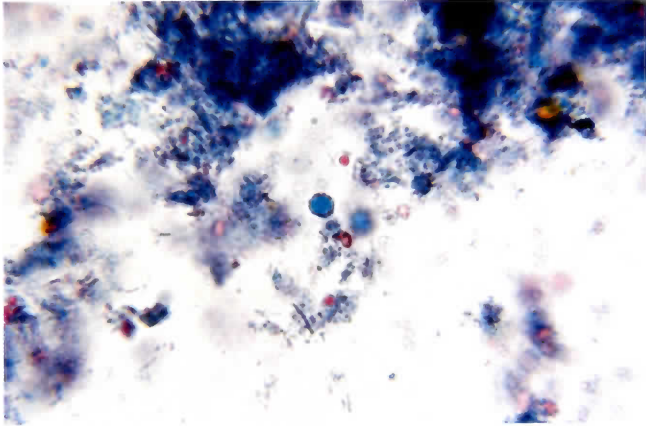
Color Plate 42



Color Plate 40



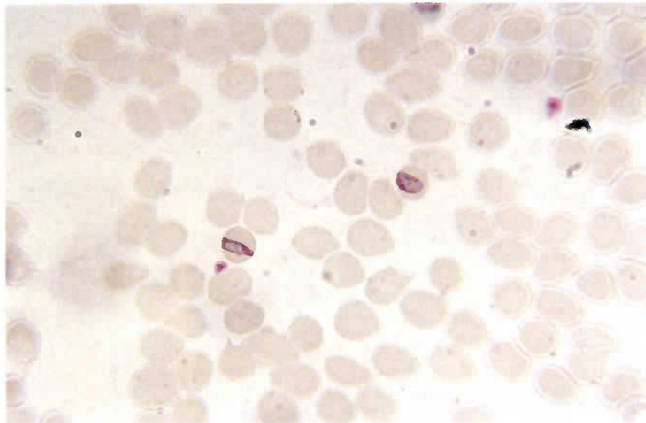
Color Plate 43



Color Plate 44



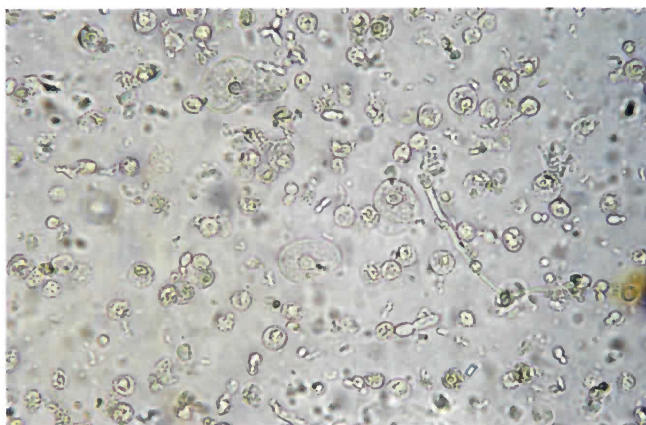
Color Plate 47



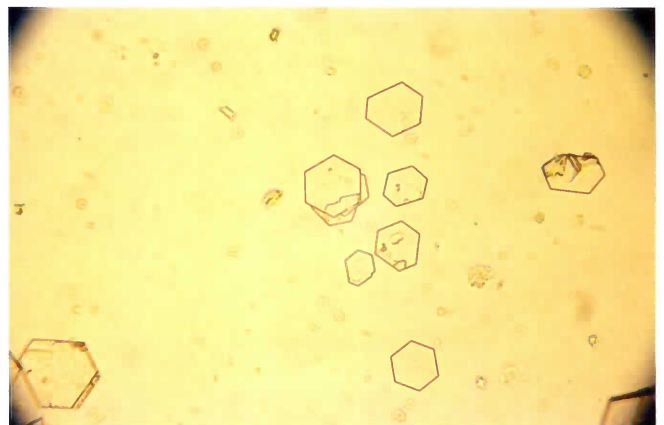
Color Plate 45



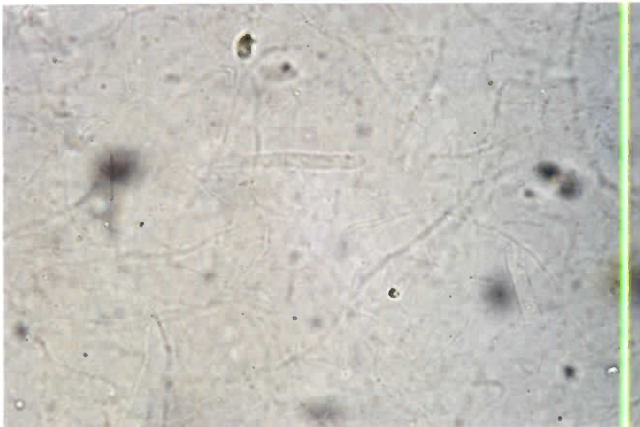
Color Plate 48



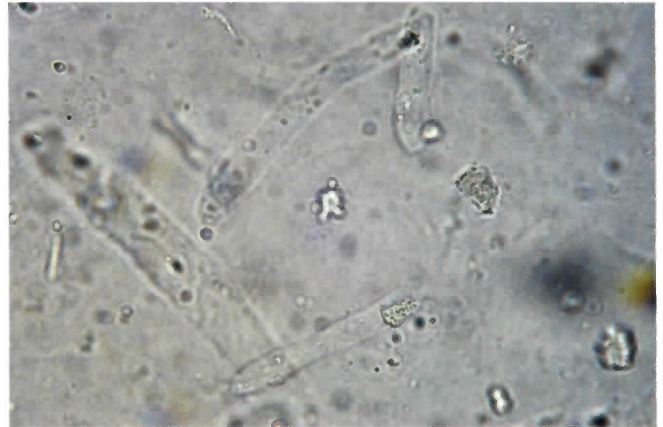
Color Plate 46



Color Plate 49



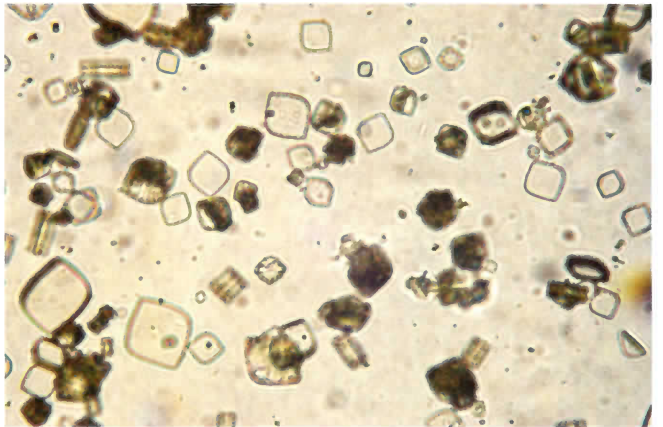
Color Plate 50



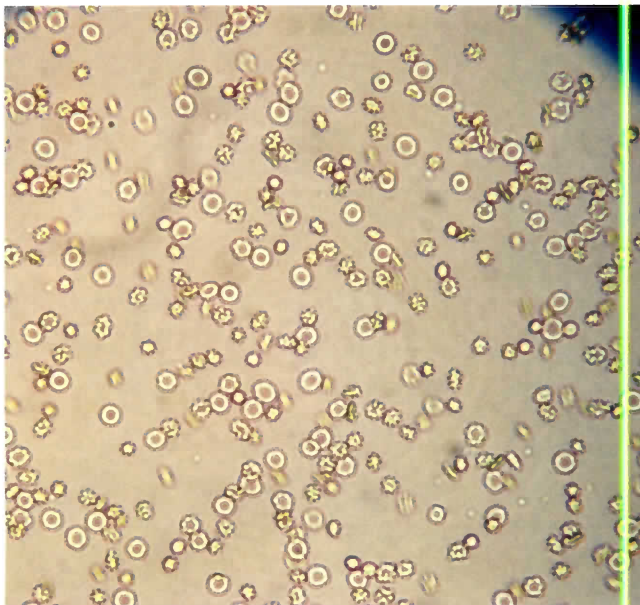
Color Plate 53



Color Plate 51



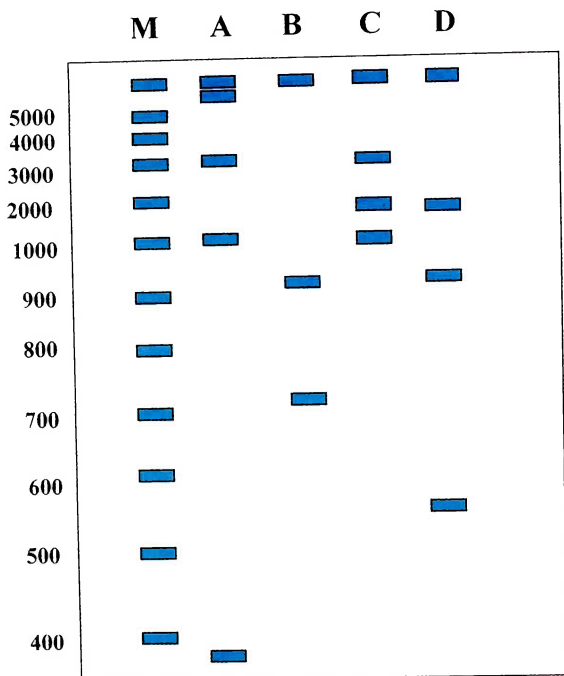
Color Plate 54



Color Plate 52

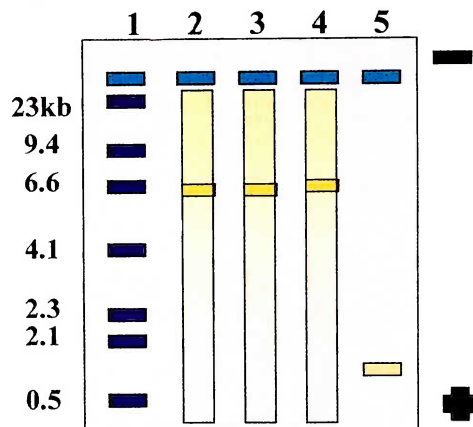


Color Plate 55



Color Plate 56

Digest DNA with restriction enzyme
Separate by electrophoresis



Chemical depurination

Denaturation

Neutralization

Transfer to membrane

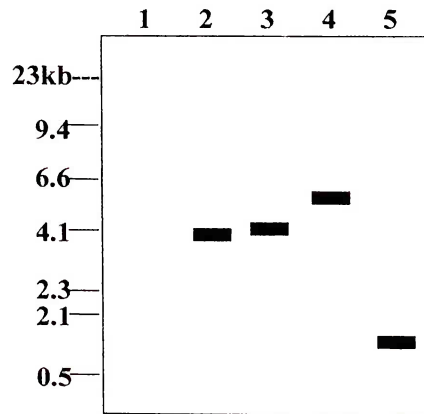
Bind DNA to membrane

Hybridize membrane with ^{32}P labeled probe

Wash off excess probe

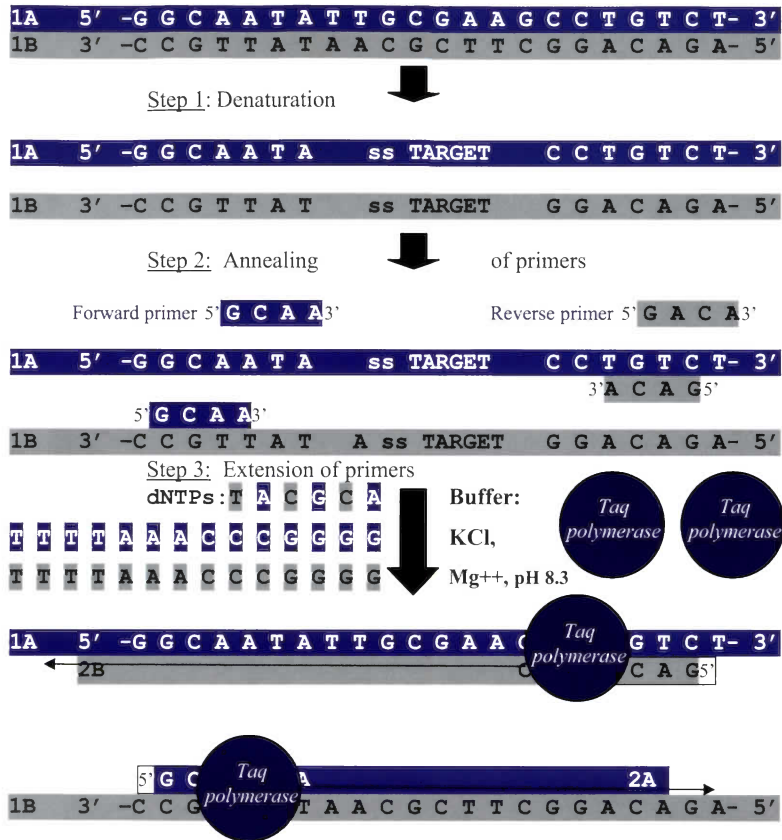
Expose to X-ray film

Develop autoradiogram



Color Plate 57

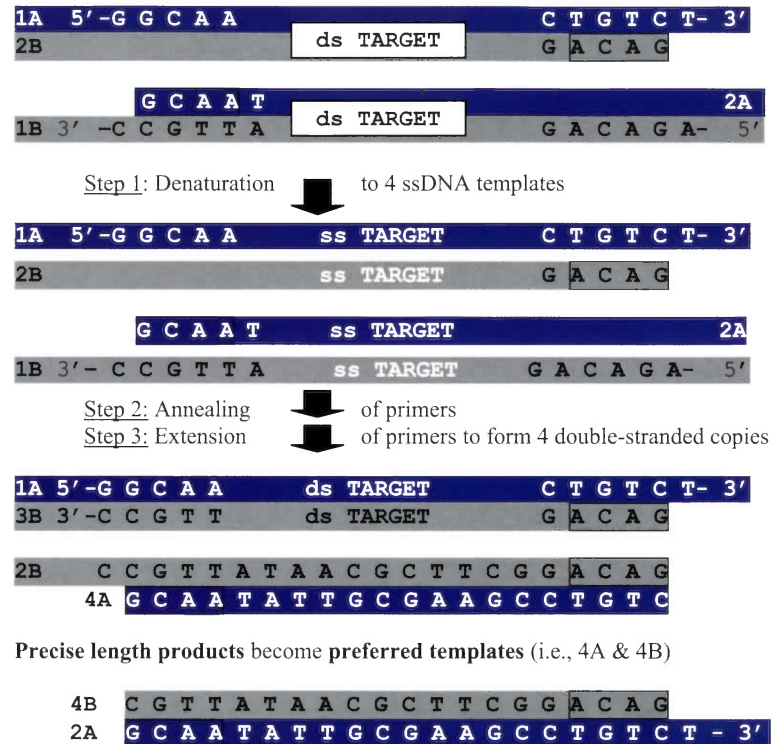
Cycle 1: Start with (1) Double-stranded DNA TEMPLATE



End of cycle 1: 2 double stranded DNA products

Color Plate 58a

Cycle 2: Start with 2 double-stranded cDNA intermediates containing target sequence



Cycle 3 to 30: Repeat 3 step cycle.

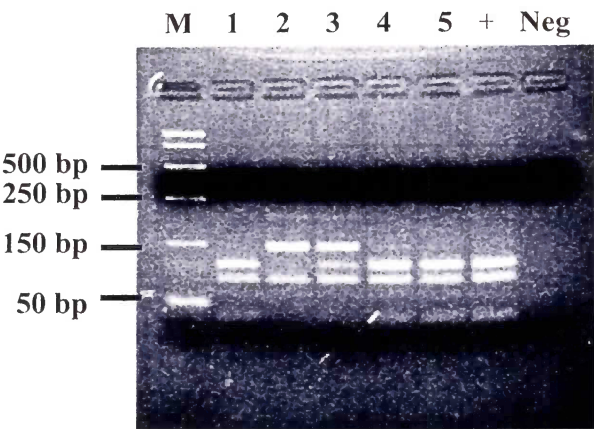
At the end of 30 cycles = 2^{30} copies of target sequence

5etc.A 5' G C A A T A T T G C G A A G C C T G T C 3'

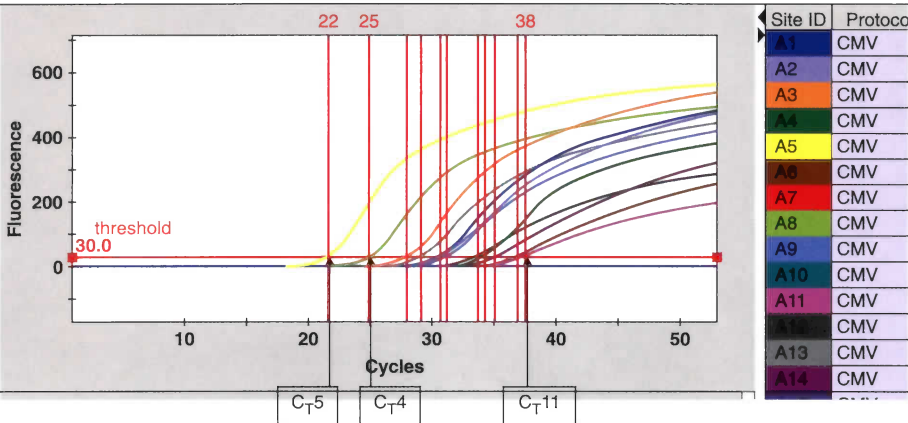
5etc.B 3' C G T T A T A A C G C T T C G G A C A G 5'

Note: Precise length products are bounded by primer sequences

Color Plate 58b



Color Plate 59



Color Plate 60